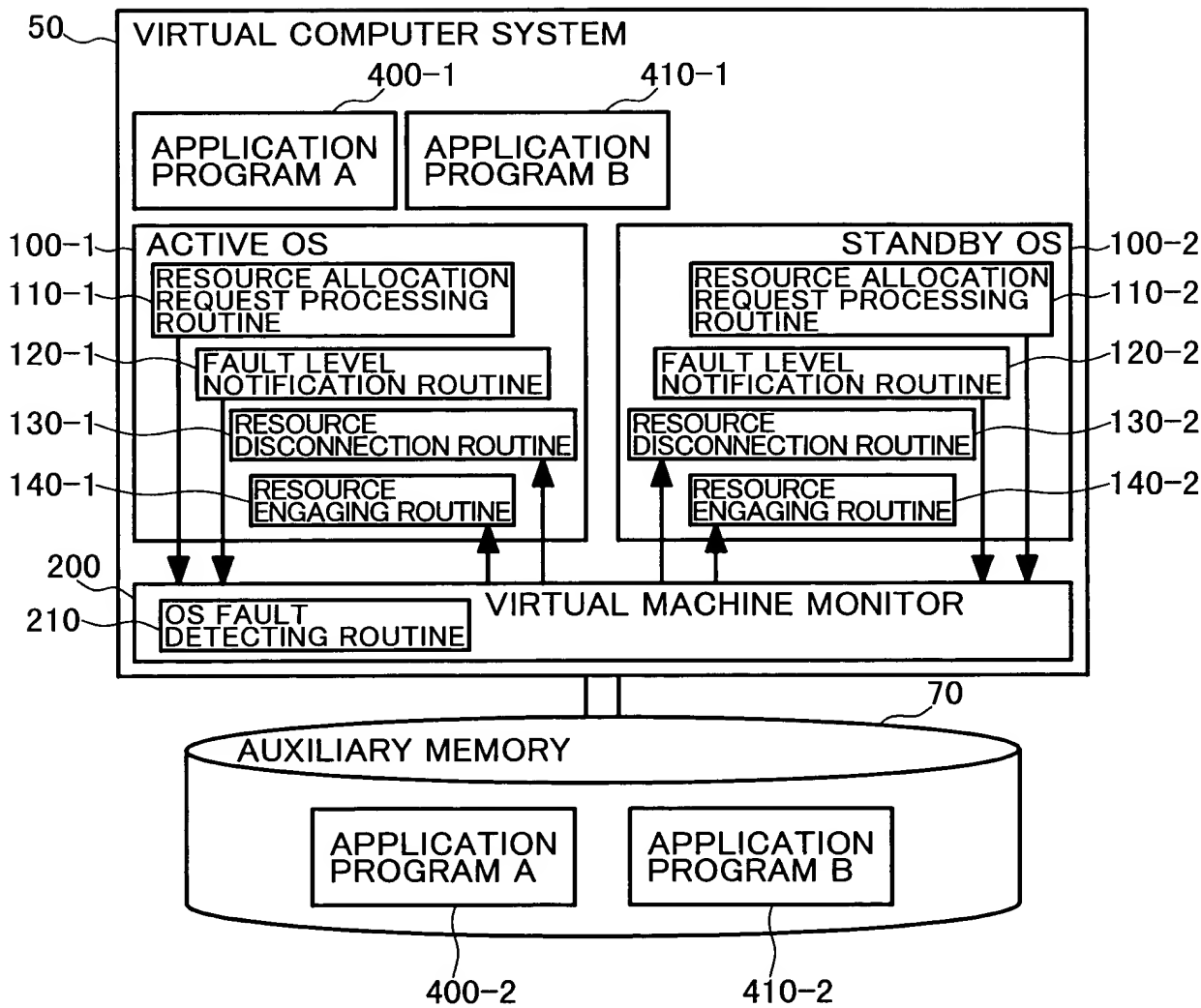# FIG.1

SOFTWEAR STRUCTURE

# FIG.2

HARDWEAR STRUCTURE
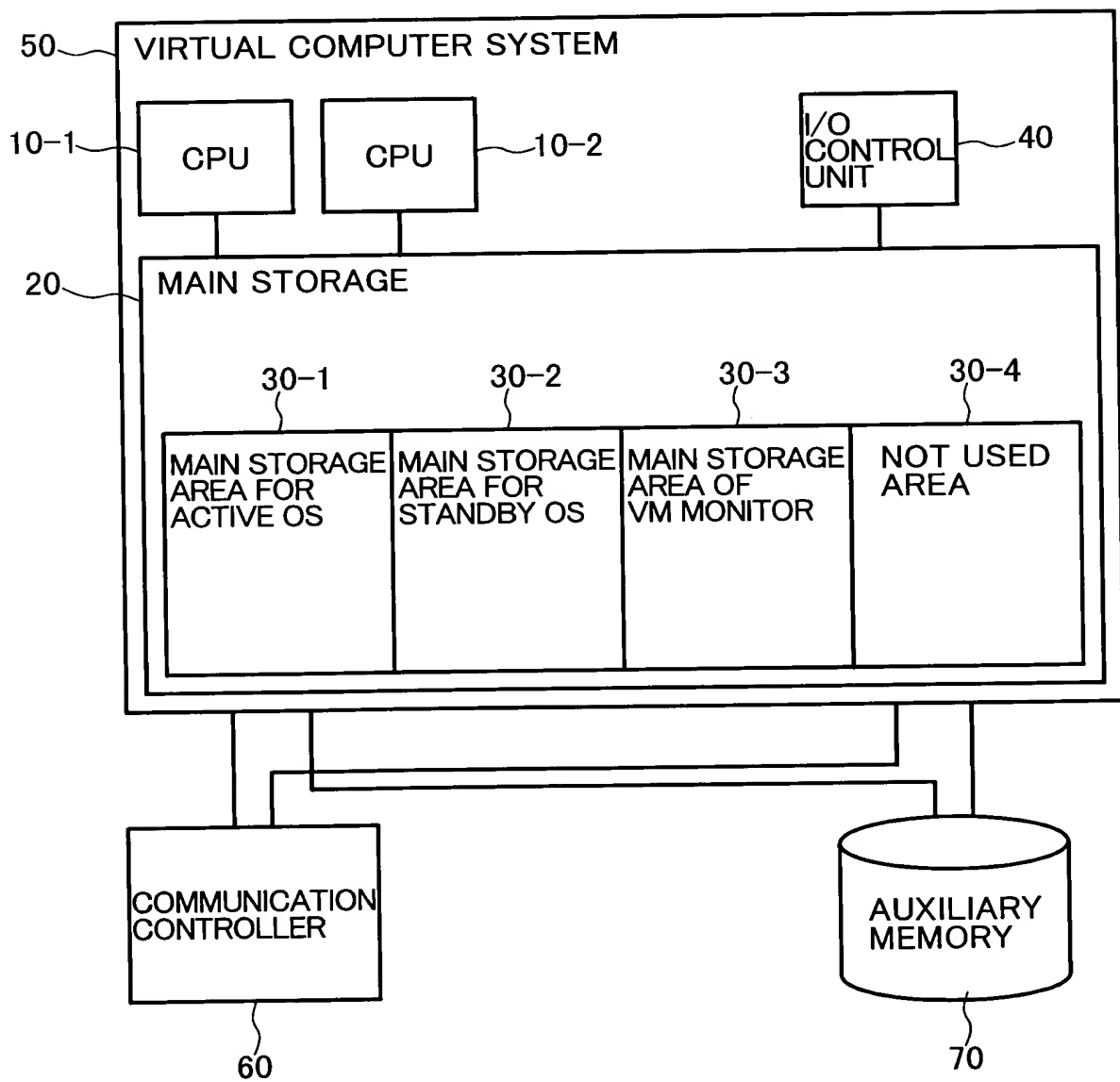
# FIG.3

SYSTEM STRUCTURE AT ACTIVE OS EXECUTION
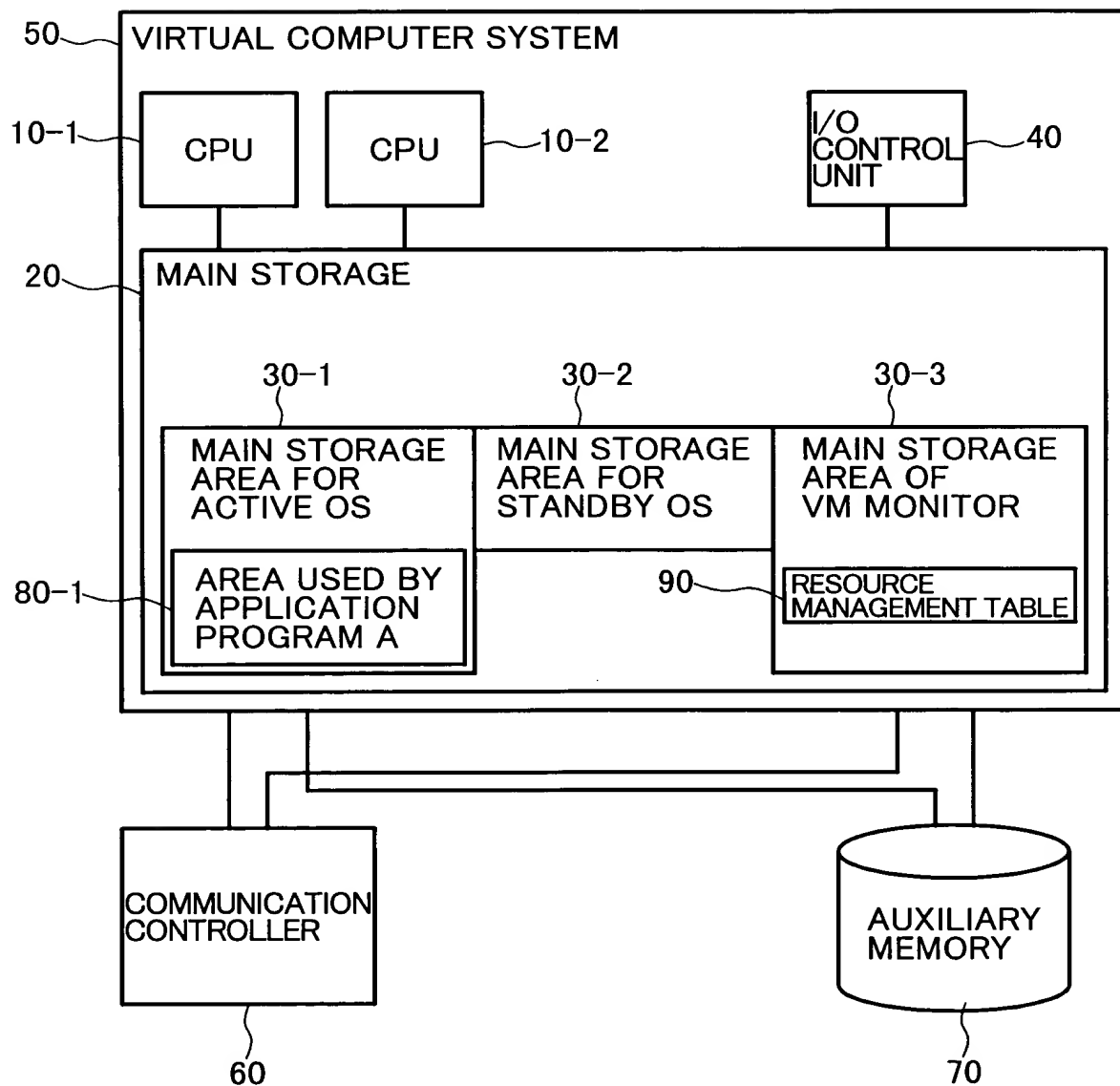
# FIG.4

## CONTENTS OF RESOURCE MANAGEMENT TABLE

### STATE A

| AREA NAME | USED SIZE | OWNER | TARGET SYSTEM TO CHANGE IN ABNORMAL STATUS |
|---|---|---|---|
| AREA USED BY ACTIVE OS | 160MB | ACTIVE OS | ACTIVE OS |
| AREA USED BY STANDBY OS | 32MB | STANDBY OS | STANDBY OS |
| AREA USED BY VM MONITOR | 32MB | MONITOR | MONITOR |
|  |  |  |  |
| NOT USED AREA | 32MB | MONITOR | MONITOR |

91-1
91-2
91-3
91-n

### STATE B

| AREA NAME | USED SIZE | OWNER | TARGET SYSTEM TO CHANGE IN ABNORMAL STATUS |
|---|---|---|---|
| AREA USED BY ACTIVE OS | 32MB | ACTIVE OS | ACTIVE OS |
| AREA USED BY STANDBY OS | 32MB | STANDBY OS | STANDBY OS |
| AREA USED BY VM MONITOR | 32MB | MONITOR | MONITOR |
| AREA USED BY APPLICATION PROGRAM A | 128MB | ACTIVE OS | STANDBY OS |
| NOT USED AREA | 32MB | MONITOR | MONITOR |

91-1
91-2
91-3
91-4
91-n

### STATE C

| AREA NAME | USED SIZE | OWNER | TARGET SYSTEM TO CHANGE IN ABNORMAL STATUS |
|---|---|---|---|
| AREA USED BY ACTIVE OS | 32MB | ACTIVE OS | ACTIVE OS |
| AREA USED BY STANDBY OS | 32MB | STANDBY OS | STANDBY OS |
| AREA USED BY VM MONITOR | 32MB | MONITOR | MONITOR |
| AREA USED BY APPLICATION PROGRAM A | 128MB | ACTIVE OS | STANDBY OS |
| AREA USED BY APPLICATION PROGRAM B | 32MB | ACTIVE OS | MONITOR |
| NOT USED AREA | 0MB | MONITOR | MONITOR |

91-1
91-2
91-3
91-4
91-5
91-n

# FIG.5

PROCESS FLOW IN ABNORMAL STATUS OF ACTIVE OS

| PROCESS ON VM MONITOR | PROCESS ON ACTIVE OS | PROCESS ON STANDBY OS |
|---|---|---|

FIND A FAULT ON ACTIVE OS — 501

DETERMINE TO RE-ALLOCATE TO STANDBY OS — 502

RESOURCE EXCHANGE REQUEST FOR STANDBY OS — 503

504 — ATTACH THE REQUESTING RESOURCE WITHIN STANDBY OS

505 — REPORT COMPLETION OF ATTACHING

CHANGE THE OWNER OF RESOURCE — 506
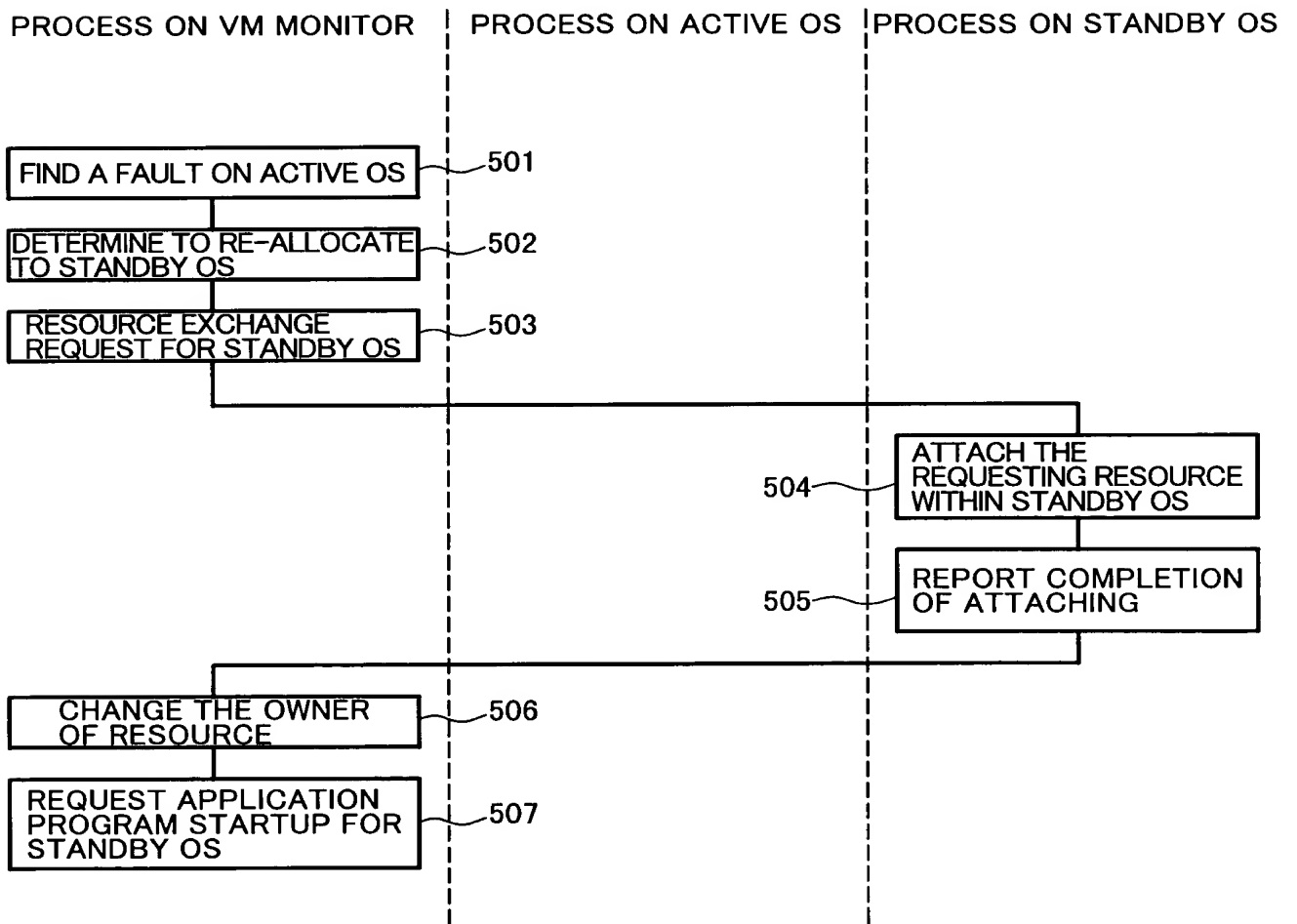
REQUEST APPLICATION PROGRAM STARTUP FOR STANDBY OS — 507

# FIG.6

## PROCESS FLOW IN ABNORMAL STATUS OF APPLICATION PROGRAM

| PROCESS ON VM MONITOR | PROCESS ON ACTIVE OS | PROCESS ON STANDBY OS |
|---|---|---|

FIND A FAULT ON AP — 601

REPORT FAULT LEVEL — 602

EVALUATE FAULT LEVEL — 603

DETERMINE TO RE-ALLOCATE TO STANDBY OS — 604

RESOURCE DISCONNECT REQUEST FOR ACTIVE OS — 605

DISCONNECT THE REQUESTED OS — 606

REPORT COMPLETION OF DISCONNECTING — 607

RESOURCE EXCHANGE REQUEST FOR STANDBY OS — 608

609 — ATTACH THE REQUESTING RESOURCE WITHIN STANDBY OS

610 — REPORT COMPLETION OF ATTACHING

CHANGE THE OWNER OF RESOURCE — 611

REQUEST APPLICATION PROGRAM STARTUP FOR STANDBY OS — 612